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Integrating Sodium Reduction Strategies in the Procurement Process and Contracting of Food Venues in the County of Los Angeles Government, 2010–2012

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Abstract

Since sodium is ubiquitous in the food supply, recent approaches to sodium reduction have focused on increasing the availability of lower-sodium products through system-level and environmental changes. This article reviews integrated efforts by the Los Angeles County Sodium Reduction Initiative to implement these strategies at food venues in the County of Los Angeles government. The review used mixed methods, including a scan of the literature, key informant interviews, and lessons learned during 2010–2012 to assess program progress. Leveraging technical expertise and shared resources, the initiative strategically incorporated sodium reduction strategies into the overall work plan of a multipartnership food procurement program in Los Angeles County. To date, 3 County departments have incorporated new or updated nutrition requirements that included sodium limits and other strategies. The strategic coupling of sodium reduction to food procurement and general health promotion allowed for simultaneous advancement and acceleration of the County's sodium reduction agenda.

Keywords

County; healthy food procurement; program intervention; sodium limits

The average amount of sodium that Americans consume remains considerably higher than the *Dietary Guidelines for Americans* recommendations.^{1,2} As indicated throughout this journal supplement, the main sources of sodium come from sodium added to restaurant and processed foods before purchase,^{3,4} which leaves consumers (eg, patrons of food venues, including vending) with very little choice about how much sodium they consume or avoid. Multiple studies have shown that foods consumed away from home are less nutritious than

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foods consumed at home and have a higher sodium density.^{5–7} Consumer choice is further reduced because acquiring nutrition information while eating away from home can be challenging, leaving consumers without the knowledge they need to make healthier choices.

Since sodium is ubiquitous in the food supply, recent approaches to sodium reduction have focused on increasing the availability of lower-sodium products through system-level and/or environmental changes. For example, implementing nutrition standards and best practices as part of healthy food procurement has become increasingly popular and an accepted approach for creating healthier food environments.^{3,8} Healthy food procurement encompasses a process of procuring, distributing, selling, and/or serving food by which an entity gives priority to options that meet healthy nutrition standards and/or put in place environmental modifications that specifically encourage selection of healthier foods and beverages.⁹ An underlying premise for intervening at the level of the food environment is the belief that increased demand for lower-sodium food products from manufacturers and food suppliers can be achieved through changes in organizational operation and contracting—that is, making healthy eating the “default” choice for patrons of these food venues.¹⁰ Organizational priority to procure and serve more healthful foods can additionally drive demand and place competitive pressure on food manufacturers to reformulate, produce, and distribute more lower-sodium products.^{11,12} Sodium limits can be proposed as part of nutritional requirements or as a condition for food service contract execution.^{9,12}

In 2010, the Los Angeles County Department of Public Health (DPH) received funding from the Centers for Disease Control and Prevention’s (CDC) Sodium Reduction in Communities Program (SRCP) to reduce sodium consumption at the community level.¹³ This funding allowed DPH to accelerate its sodium reduction agenda by establishing the Los Angeles County Sodium Reduction Initiative (LACSRI) to introduce and incorporate sodium reduction approaches into the Department’s Healthy Food Procurement Initiative (HFPI). The HFPI initiative targeted food venues within the County government, at several school districts, and in 10 cities. The SRCP funding allowed the DPH to add key staff to provide technical support and strategic guidance to the HFPI. Started in 2009, the program initiative comprised members from the DPH Nutrition and Physical Activity Program, representatives from several community-based organizations, and staff from the local Communities Putting Prevention to Work obesity prevention program, RENEW LA County.¹⁴ At its inception, the HFPI primarily convened planning meetings to develop strategic directions for the initiative.

This article describes the process of integrating sodium reduction into DPH’s broader, more comprehensive effort to advance healthy food procurement in the County of Los Angeles government (County). It also reviews programmatic achievements and lessons learned from the LACSRI during 2010–2012.

Sodium Reduction Efforts in Los Angeles County, California

Context

Larger than 42 states combined, Los Angeles County is one of the most diverse regions in the United States, with approximately 9.8 million residents and more than 100 different

spoken languages.¹⁵ Geopolitically, the jurisdiction is home to a complex array of governing agencies and municipalities. This includes 88 incorporated cities (among them the City of Los Angeles), 80 school districts, and the largest county government in the nation—County of Los Angeles. The latter comprises 37 departments and more than 100 000 employees.¹⁵ Within this landscape exist important opportunities to transform food environments through system-level and environmental changes.

Early assessment

In fall 2009, the DPH conducted a criteria-based assessment (methods including key informant interviews are described elsewhere¹⁶) of different options for reducing sodium consumption in the local population. The results of this assessment suggested that a potentially effective approach to accomplishing this task was through the use of governmental food procurement strategies aimed at changing food and/or vending practices.¹⁶ A subsequent study found that developing or changing practices for procuring, distributing, selling, and/or serving food represented a potentially feasible strategy for reducing sodium consumption in food venues controlled by the County of Los Angeles government and that by addressing the unique needs and constraints of these diverse venues through the use of department-specific, “venue-based” approaches, the changes could be more sustainable over time.¹⁷ In an organization with a heterogeneous infrastructure and that serves diverse functions, this approach was considered ideal, as it allowed for some customization of standards and requirements by department and by food service venue. For example, a cafeteria in a juvenile hall, which primarily serves children and adolescents, can have different nutrient standards for meals served, as compared with a cafeteria located in the Department of Public Works where they serve employees and the general public.

To guide the work of the LACSRI, the project team reviewed the scientific literature as well as the broader evidence base of reports, Web sites, and the assessments described earlier. The team also considered the feasibility of implementing various sodium reduction strategies in a large organizational setting.^{9,16–20} Of particular interest to the team were interventions that would be feasible to implement concurrently, including the following:

1. Incorporating sodium limits and other health and sustainability guidelines (eg, nutrition standards) in institutional food service environments.^{12,21}
2. Developing a gradual sodium reduction plan to improve the quality and quantity of lower-sodium food products over time.¹¹
3. Improving patron choice by providing information about sodium content at the point-of-purchase or point-of-selection (eg, menu labeling).^{9,20,22–24}
4. Influencing patron food selection through the use of signage to promote lower-sodium products.^{21,25}
5. Promoting fresh fruit and vegetable intake and water consumption.²⁶
6. Using pricing incentives or disincentives to make lower-sodium products more competitive with existing products that are higher in sodium content.^{9,27}

An opportunity to change County food environments

In March 2011, the County of Los Angeles Board of Supervisors passed a motion requiring all County departments involved in purchasing, distributing, selling, and/or serving food to consult with the DPH prior to the release of any Request for Proposals (RFPs) for new or renewing food service and vending contracts.²⁸ In response to this motion, the LACSRI project team, in collaboration with members from the HFPI, developed and established a 5-phase process to support DPH's newly assigned function and to guide responses to forthcoming workload.⁸ The 5 phases are as follows: (1) needs assessment, (2) stakeholder education and strategy development, (3) system change adoption, (4) program or project implementation, and (5) compliance monitoring and quality improvement. These phases were developed to streamline and expedite DPH's internal process for reviewing new and renewing food service and vending contracts. Typically, only departments with new or an existing contract that is up for renewal are required to consult with the DPH.

The LACSRI project team recognized that integrating sodium reduction as part of the HFPI would be challenging, especially because the processes involved were programmatically complex and would require extensive coordination of outreach, stakeholder education, and evaluation within multiple organizational units in the DPH as well as with other County departments. The DPH's earlier work in promoting good nutrition by reducing sugary drink consumption was supported by personnel from RENEW LA County and in-kind staffing from the DPH; however, this arrangement did not provide optimal staffing and resources to address new system-level and environmental changes that were expected as a result of the County motion. Thus, to address these needs, the DPH designated a full-time equivalent position to facilitate and manage the 5-phase planning process. An important advantage of integrating sodium reduction into the HFPI was the increased access to registered dietitians and policy analysts who can assist with developing gradual sodium reduction plans and other field interventions designed to reduce sodium content in foods served by County departments.

The LACSRI project team viewed adoption of the motion on food procurement by the County as an unprecedented opportunity to integrate sodium reduction into the contracting process and operations of a large number of County food venues (*Objective 1*, Figure 1). County food venues serve a broad spectrum of patrons, ranging from employees, incarcerated individuals, seniors, children, and the general public. Both the LACSRI and the HFPI favored department-specific, venue-based approaches as previously described. To date, project staff have worked with several departments to better understand their food practices, existing nutrition standards, and opportunities for increasing the healthfulness of the food they served. Staff from each of the departments, for example, were interviewed to assess food procurement practices related to sodium as well as to other nutrients. The Countywide assessment revealed which departments were involved in procuring, distributing, and/or selling food and the number of employees in each of the 12 departments that were identified (Table 1). Figure 2 shows the average number of meals served per day by these departmental food service environments (eg, worksite cafeterias, mobile trucks, snack shops). The Countywide needs assessment also provided LACSRI and HFPI staff a

deeper understanding of the processes and concerns of each department and information to estimate the forthcoming workload (eg, number of upcoming RFPs and contracts).

Following the needs assessment, LACSRI project staff began educating stakeholders and worked closely with other HFPI staff to develop a strategy to codify the board motion. During this early stage of the effort, they worked closely with stakeholders from 3 departments (described later) to develop plausible strategies that can be included in their food service and vending RFPs. Through the RFP process, each selected food vendor must comply with the specifications outlined by the agency soliciting bids. These specifications were based on DPH recommendations. The recommendations were not limited to only sodium but also included other nutrition-related procurement strategies that are designed to improve overall nutrition. Sodium-specific recommendations that were incorporated into these RFPs have included but were not limited to the following:

- Limiting sodium for meals/entrées to 600 mg or less per meal/entrée, for sides to 360 mg or less per side, and for snacks to 360 mg or less per snack (Table 2).
- Developing a plan to gradually reduce the sodium of foods served.
- Providing nutrient information on menus.
- Using signage and product placement that promotes low-sodium food options (eg, fruit and vegetables placed at checkout stands).
- Replacing canned foods with fresh food; but when this is not feasible, lower-sodium versions of canned foods are recommended.
- Implementing price incentives to encourage consumption of lower-sodium options in venues where patrons directly purchase food.

Although these sodium-specific recommendations are considered core elements for inclusion in most RFPs/contracts, they are not universally applicable, as conditions may vary by department and by food venue. For instance, the use of signage and product placement is generally not applicable in institutionalized populations (eg, in juvenile halls and probation camps), as most meals are planned without patron input in these settings.

Achievements to Date

Three of the 12 County departments that procure, distribute, sell, and/or serve food (Table 1) during 2010–2012 incorporated new or updated nutrition standards and requirements into their food service and vending processes. These new or updated standards and requirements included sodium limits and several best practices in healthy food procurement (eg, use of signage, pricing incentives, and menu labeling) (Table 2). They were established through modifications of existing administrative procedures or included as part of the RFP or contracting process. The Department of Corrections (Probation), for instance, incorporated sodium limits into their RFP process for selected food vendors that serve meals to children and adolescents in juvenile halls and probation camps. The Department of Public Works incorporated both sodium limits and other best practices in healthy food procurement as part of their RFP and in the subsequent vendor contract for its central cafeteria; the cafeteria serves not only the Department of Public Works staff but also other staff from other

departments housed in adjacent offices. The Department of Health Services took similar action to include sodium limits, menu labeling, and signage as part of their hospital cafeteria RFP; these specifications, however, have not taken effect due to administrative delays in vendor selection. Collectively, these sodium reduction strategies in the 3 departments have the potential to affect more than 100 000 meals served per day in the County of Los Angeles (Figure 2). As the LACSRI continues to work alongside the HFPI, further sodium reduction innovations may come to fruition, as forthcoming RFPs/contracts present additional opportunities to advance and evaluate food procurement strategies in the County of Los Angeles.

Lessons Learned

Although the County departments described in this article varied in their mission, organizational structure, and geopolitical landscape, 3 key lessons emerged from the SRCP experience in Los Angeles County.

1. *Implementation takes time and effort.* The County of Los Angeles Board Motion granting authority to the DPH to review and make recommendations on all new or renewing food service and vending contracts served as an important foundation for improving the food environment in County departments. However, adoption of this mandate was only the first step of a lengthy process for codifying the innovative changes in practice. The presence of the motion, for example, did not automatically change the environmental context, potential barriers to implementation, or the work needed to sustain the practice innovations. In most instances, technical assistance was required to assist each department and its vendor(s) with compliance and implementation of the required practices. This process, as well as buy-in from the department, vendor, and food venue patrons, has taken some time to achieve.
2. *Multiple strategies to reduce sodium content in food can work synergistically.* The LACSRI took advantage of the opportunity to implement an array of sodium reduction strategies by integrating them into a broader County initiative supported by multiple efforts (eg, RENEW LA County, Choose Health LA) to promote healthy food procurement. During the SRCP, procurement requirements were changed to include not only sodium limits but also other nutrient limits and practices that had the potential to decrease sodium consumption (eg, promotion of fruit and vegetables using signage, portion control). Each of these strategies led to positive changes in the food environment and, together, reinforced and supported sodium reduction in the overall food procurement effort. An important lesson learned in this process was the synergies that multiple sodium reduction strategies created with other food environment interventions.
3. *Advantages of coupling sodium reduction to broader efforts to improve nutrition.* Incorporating sodium reduction as part of a broader nutrition message was advantageous to the LACSRI because it allowed the subject to be introduced and discussed innocuously as part of an overall agenda on health. Not having to singularly convince food service directors or managers to consider sodium reduction by itself enabled the project team to focus more attention on other

barriers to implementation, such as the complex and time-consuming administrative procedures in contracting, the nuances of writing contract language, and the variable levels of consumer acceptance of lower-sodium food offerings.¹⁶

Applying an integrative approach to sodium reduction in the County of Los Angeles allowed for simultaneous advancement and acceleration of several food procurement changes in County venues and in other local food service and vending environments. In concert with other efforts in schools, in the retail environment, and through public education or health marketing, multisectoral partnerships are emerging as necessary components for achieving the full benefits of reducing sodium consumption in the population.²⁹ These local efforts, together with national efforts,² can cumulatively lead to a potential shift in the demand for lower-sodium products and serve as the first big step toward changing the food supply toward a healthier norm.

Conclusion

The LACSRI experience in the County of Los Angeles provides real-world context and lessons learned on the plausibility and potential of local efforts to reduce sodium consumption in the community, featuring workable models of practice and cross-learning opportunities for other jurisdictions to consider, especially among those that are ready to take action.

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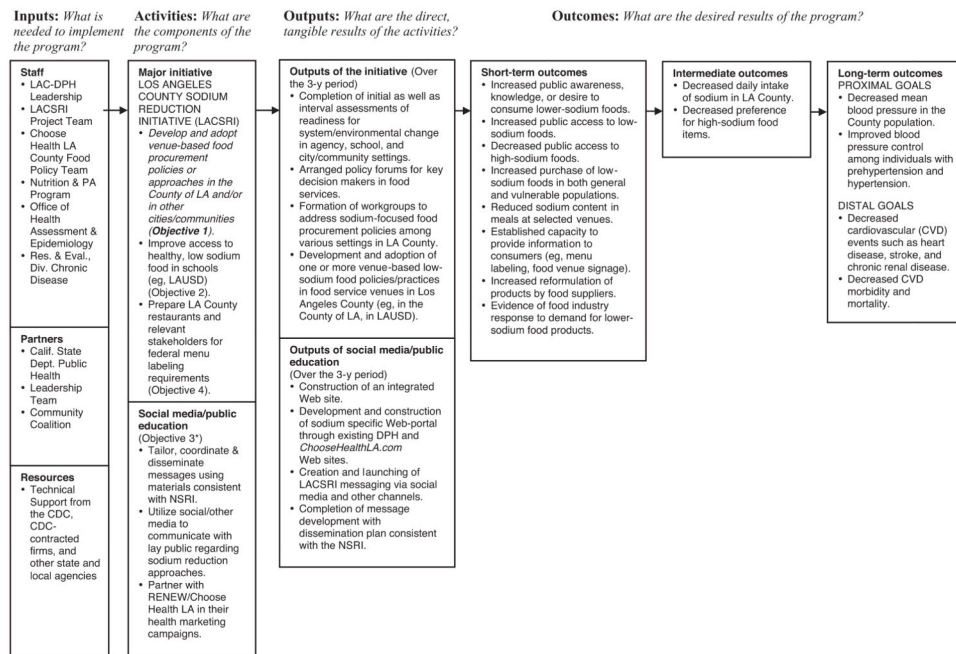
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**FIGURE 1.**

Programmatic Framework for the Los Angeles County Sodium Reduction Initiative—Objective 1 (Under Major Initiative)

Abbreviations: CDC, Centers for Disease Control and Prevention; DPH, Department of Public Health; LA, Los Angeles; LAC, Los Angeles County; LAUSD, Los Angeles Unified School District; LACSRI, Los Angeles County Sodium Reduction Initiative; NSRI, National Salt Reduction Initiative; PA, Physical Activity.

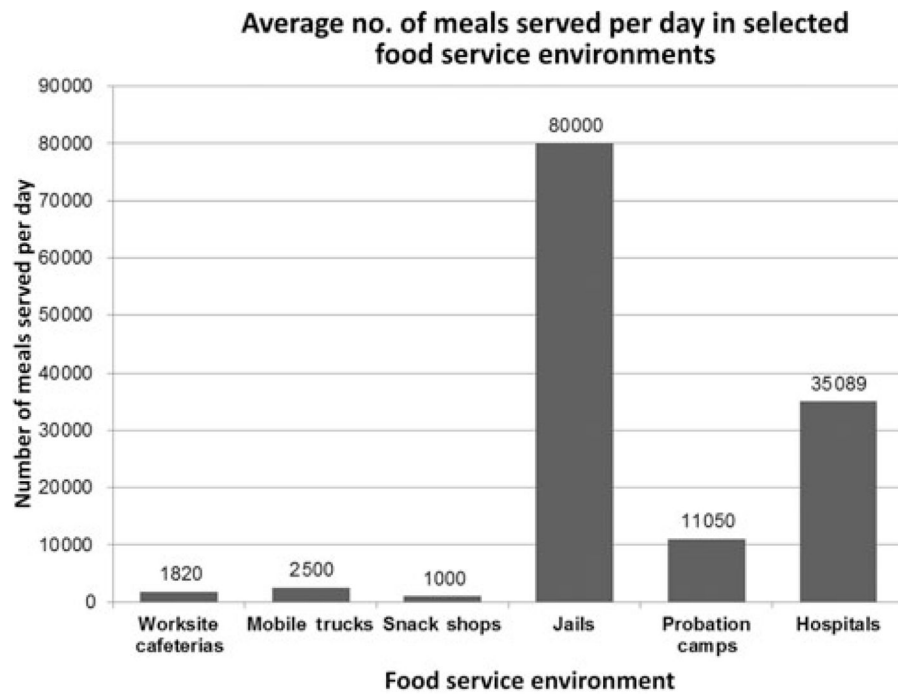


FIGURE 2.

Food Service Environments in the County of Los Angeles Government, 2010–2012

TABLE 1**Organizational Structure in the County of Los Angeles Government, 2010–2012**

Organizational Structure	n
Total number of departments	37
Total number of departments that procure, distribute, sell, and/or serve food	12 ^a
Approximate number of departments that provide services to the following groups ^a :	
Children	3
Seniors (age 65+)	1
Institutionalized populations	2
Employees	9
Community members/visitors	4
Approximate numbers of employees in the 12 departments that procure, distribute, sell, and/or serve food	
Beaches & Harbors	255
Chief Executive Office	501
Children & Family Services	6 500
Community Development	480
Senior Services	504
Fire Department	5 000
Health Services	21 700
Parks and Recreation	1 461
Probation	5 800
Public Works	5 000
Sheriff's	18 000
Internal Services	2 235

^a Approximation based on a *Countywide* departmental assessment.

TABLE 2

Strategies Adopted to Reduce Sodium Content in Foods Procured, Distributed, Sold, and/or Served by Food Venues in the County of Los Angeles, 2010–2012^a

Recommendations	What Was Affected?
Sodium limits established for meals/entrées and sides: 600 mg per meal/entrée 360 mg per side	The following food categories must meet recommended sodium limits ^b : Main dish/entrées Side items Combination meals
Sodium limits established for snacks: 360 mg per snack	All snacks sold (including those in vending machines) must follow established sodium limits as recommended by the Los Angeles County Department of Public Health
Other recommended practices that may reduce sodium consumption	Departments with new or renewing food service and vending contracts were asked by the Los Angeles County Department of Public Health to integrate the following practices that may help reduce sodium content or intake: Menu labeling Signage and product placement that promote low-sodium food options (eg, fresh fruit and vegetables) No salt added or elimination of canned foods, if feasible Gradual sodium reduction plan

^a Standards specific to County of Los Angeles hospital and workplace cafeterias (ie, does not include standards for distributive meal programs).

^b These standards are for food sold by cafeterias and concession services on government property.